

Notice of Allowability

Application No.

09/669,098

Examiner

Anh-Vu H. Ly

Applicant(s)

MOON ET AL.

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an appeal brief filed July 12, 2005.
2. ☒ The allowed claim(s) is/are 1, 3-5, 7-11, 13-15, 17-21, 23-25, 27-31, 33-34 and 36-39 renumbered as 1-31 respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kurt M. Pankratz on October 5, 2005.

The application has been amended as follows:

In The Claims

1. (Currently Amended) A base transceiver station (BTS) comprising:
a wireless interface operable to receive information from a mobile unit using a wireless link between the wireless interface and the mobile unit;
a processor operable to:
determine a metric associated with the wireless link; and
generate a graded packet encoding the information and the metric, wherein the metric enables elements of a core packet network to select between multiple packets encoding the information;
monitor the metric associated with the wireless link;
determine that the metric associated with the wireless link has degraded below a predetermined threshold;
withdraw from a selection group associated with the mobile unit; and

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instruct the wireless interface to discontinue receiving further information from the mobile unit; and

a network interface operable to communicate the graded packet to the core packet network;

wherein the processor is further operable to:

monitor a second metric associated with a second wireless link between the wireless interface and a second mobile unit;

determine that the second metric associate with the second wireless link has exceeded a predetermined threshold;

register with a selection group associated with the second mobile unit; and

instruct the wireless interface to begin receiving information from the second mobile unit.

2. (Canceled).

– Claim 3, in line 1, replace “claim 2” with - -claim 1- -.

– Claim 4, in line 1, replace “claim 2” with - -claim 1- -.

– Claim 5, in line 1, replace “claim 2” with - -claim 1- -.

6. (Canceled).

11. (Currently Amended) A method for wireless communications comprising:

receiving information from a mobile unit using a wireless link with the mobile unit;

determining a metric associated with the wireless link;

generating a graded packet encoding the information and the metric, wherein the metric enables elements of a core packet network to select between multiple packets encoding the information;

communicating the graded packet to the core packet network;

monitoring the metric associated with the wireless link;

determining that the metric associated with the wireless link has degraded to a predetermined threshold;

in response to determining that the metric associated with the wireless link has degraded, withdrawing from a selection group associated with the mobile unit and discontinuing to receive further information from the mobile unit;

monitoring a second metric associated with a second wireless link with a second mobile unit;

determining that the second metric associated with the second wireless link has exceeded a predetermined threshold;

registering with a selection group associated with the second mobile unit; and
receiving information from the second mobile unit.

12. (Canceled).

Claim 13, in line 1, replace "claim 12" with - -claim 11- -.

Claim 14, in line 1, replace "claim 12" with - -claim 11- -.

Claim 15, in line 1, replace "claim 12" with - -claim 11- -.

16. (Canceled).

21. (Currently Amended) Wireless communications software, the software embodied in a computer readable medium and operable when executed to:

receive information from a mobile unit using a wireless link with the mobile unit;

determine a metric associated with the wireless link;

generate a graded packet encoding the information and the metric, wherein the metric enables elements of a core packet network to select between multiple packets encoding the information;

communicate the graded packet to the core packet network;

monitor the metric associated with the wireless link;

determine that the metric associated with the wireless link has degraded to a predetermined threshold;

in response to determining that the metric associated with the wireless link has degraded, withdraw from a selection group associated with the mobile unit and discontinue to receive further information from the mobile unit;

monitor a second metric associated with a second wireless link with a second mobile unit;

determine that the second metric associated with the second wireless link has exceeded a predetermined threshold;

register with a selection group associated with the second mobile unit; and

receive information from the second mobile unit.

22. (Canceled).

Claim 23, in line 1, replace "claim 22" with - -claim 21- -.

Claim 24, in line 1, replace "claim 22" with - -claim 21- -.

Claim 25, in line 1, replace "claim 22" with - -claim 21- -.

26. (Canceled).

31. (Currently Amended) A base transceiver station (BTS) comprising:

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means for receiving information from a mobile unit via a wireless link with the mobile unit;

means for determining a metric associated with the wireless link;

means for generating a graded packet encoding the information and the metric, wherein the metric enables elements of a core packet network to select between multiple packets encoding the information;

means for communicating the graded packet to the core packet network;

means for monitoring the metric associated with the wireless link;

means for determining that the metric associated with the wireless link has degraded to a predetermined threshold;

means for withdrawing from a selection group associated with the mobile unit in response to determining that the metric associated with the wireless link has degraded;

means for discontinuing to receive further information the mobile unit;

means for monitoring a second metric associated with a second wireless link with a second mobile unit;

means for determining that the second metric associated with the second wireless link has exceeded a predetermined threshold;

means for registering with a selection group associated with the second mobile unit; and

means for receiving information from the second mobile unit.

32. (Canceled).

Claim 33, in line 1, replace "claim 32" with - -claim 31- -.

Claim 34, in line 1, replace "claim 32" with - -claim 31- -.

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35. (Canceled).

Allowable Subject Matter

2. Claims 1, 3-5, 7-11, 13-15, 17-21, 23-25, 27-31, 33-34 and 36-39 allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly suggest that the base transceiver stations, grouped according to the monitored metrics, generate the graded packets and forward these graded packets to the core packet network, as specified in independent claims 1, 11, 21, and 31.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Moon (US Patent No. 6,909,698 B1) discloses redundant packet selection based on packet content in wireless communications systems.

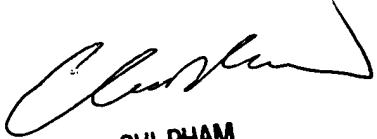
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl


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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800 10/11/05